

Claims

1 A method for generating and processing data for the display of a stream of video data on a display screen connected to data processing apparatus, said apparatus processing an MPEG compliant data stream of video data selected to be viewed by a user in a first format via said apparatus and said user provided with means to select to view the said video data in an altered format, said altered format generated by the apparatus and characterised in that, following the user selection of the altered format, the method includes the step of identifying the required level of data to be held in a buffer memory in the apparatus prior to decoding the first frame of video data for the alternative format.

2 A method according to claim 1 characterised in that the method utilises the determined buffer memory size in identifying a value of the separation of the encoded frames in the video data bitstream and uses this value as a substitute for the various header field values of the MPEG data stream which are unavailable.

3. A method according to claim 1 characterised in that the altered format is a fast cue or fast review video display.

4 A method according to claim 1 characterised in that the determination of the required buffer memory size is made for the largest frames of the video data known as the I frames.

5 A method according to claim 4 characterised in that the required buffer memory data level is set at a value to minimise delay in the transition between the generation of video from the normal and altered video formats such that the level is set at, or

substantially at, a level of sufficient size to accommodate the data for the I frame.

6 A method according to claim 1 characterised in that when arriving at the level of the buffer memory data reference is made to time stamp data transmitted as part of the video data.

7 A method according to claim 6 characterised in that the time stamp data is carried as part of the systems layer and the time stamp data allows data in the other levels to be time synchronised by referring to and retrieving a common reference time from the time stamp data.

8 A method according to claim 6 characterised in that the method includes the use of the time stamp data to estimate the size of the I frame data and hence the required video buffer memory data level.

9 A method according to claim 1 characterised in that the video data is received by the apparatus, said data having been transmitted from a location remote to the apparatus.

10 A method according to claim 9 characterised in that the apparatus is a broadcast data receiver (BDR) connected to receive data from a broadcaster.

11 A method of generating a video display in a first standard MPEG format and a second user selectable fast forward or fast cue format, said method involving the steps of, upon user selection of the fast forward or fast cue format, obtaining a value indicative of the separation of received encoded frames in the video data bitstream and using that value as a replacement value to indicate a required level of data to be held in a buffer

memory device prior to the commencement of the decoding and display of the first frame of data for the fast forward or fast cue display.